2004 Coastal America Partnership Awards

NERIT

Bridge Creek

Phase I of the Bridge Creek Salt Marsh Restoration entailed installing a culvert under an active railroad bed. Initially, this restoration partnership was judged to be impractical. However, when the Town of Barnstable and the Massachusetts Office of Coastal Zone Management - Wetlands Restoration Program (WRP) learned in Fall 2001 that the rail line would be inactive for one month during March 2003, they sped into action and effective partnerships were forged.

The partnership that was forged to complete the design, permitting, funding and construction through donations of services, last-minute grants for funding short-falls, and continued coordination provided a creative solution to implementing the first phase in light of the strict project deadlines. Additional significant achievements include: Restoring tidal exchange to approximately 40 acres of tidally restricted salt; Obtaining the maximum degree of tidal restoration possible without causing any upstream flooding of low-lying structures; Providing a highly visible and easily accessible demonstration site for educating the general public, community leaders, political leaders, students and others regarding the need for, and value of, wetland restoration.

Barn Island

An outstanding environmental victory was recently achieved with the addition of 144 acres of private property to the state's 869-acre Barn Island Wildlife Management Area (WMA) in Stonington, Connecticut. The WMA, including the new property, is part of the Barn Island and Continental marsh complex, described as "the finest wild coastal area in Connecticut." The new property had been permitted for a golf course development that could have caused irreparable harm to this extraordinary ecosystem. Instead, this acquisition will secure the last link in the protection of the marsh complex and adjoining coastal forest. This follows a 50-year effort by the Connecticut Department of Environmental Protection to acquire, research, and restore this important coastal habitat.

The U.S. Fish and Wildlife Service Coastal Program worked with Connecticut Department of Environmental Protection and The Nature Conservancy to fund this project, which included a \$1 million Coastal Wetland Conservation grant from the Service. Connecticut CWRP contributed \$5,000 for educational signage at the WMA, helping to boost the strength of the grant application and enabling an important public education component to be completed at this spectacular wetlands site. A number of local organizations aided in making this project a success.

MARIT

Embry Dam Removal

Located in Fredericksburg, Virginia, the Embry Dam was the only man-made impediment to fish passage on the main-stem Rappahannock River. A Senate resolution resulted in the authorization to remove the structure at full federal expense. 300,000 cubic yards of sediment had accumulated behind the dam and had to be removed. Once sediments were dredged, the Army and Air Force worked jointly to use explosives to notch out a 100-foot section of the dam, allowing for fish migration in the Spring of 2004. This was conducted as an Innovative Readiness Training opportunity. After the migratory fish season has passed, the Corps of Engineers will complete the project by removing the remainder of the structure in the

fall of 2004. On a regional scale, this project is a major contributor to the Chesapeake 2000 Agreement fish passage goal of opening 1,357 miles of currently blocked river habitat.

Big Egg Marsh

Under the leadership of the National Park Service, a team implemented an innovative pilot salt marsh restoration project in 2003 at Jamaica Bay Wildlife Refuge's Big Egg Marsh in New York City. The project objectives were to evaluate: (1) results of a new method of sediment transfer and placement used to increase marsh elevation, (2) growth of marsh vegetation through a thin layer of sediment, and (3) pretreatment and post-treatment inventory and monitoring information.

According to the New York State Department of Environmental Conservation, Jamaica Bay's protected salt marsh islands halved in area since 1924, when 2,300 acres existed. The marsh islands have experienced an accelerated loss from 26 acres per year in the 1970s to the current 44 acres per year. In May 2001, a Blue Ribbon Panel concluded that the likely causes of salt marsh loss include: decreased availability of sediment, sea level rise, erosion, plant mortality, and the isolation of the bay from sediments as a result of natural lengthening of the adjacent barrier island. The restorative component of the project was designed, in part, to evaluate "thin-layering," a relatively recent method of sediment application for tidal marshes, as a means of re-establishing salt marsh vegetation and increasing the overall elevation of the deteriorating marshes. A wayside educational component has also been incorporated to enhance public understanding and cooperation. Results of the project will be used to guide future restoration efforts, which will focus on enhancing deteriorated salt marsh ecosystems.

Webster Field Shoreline Stabilization

With a need to protect shoreline resources at the Naval Air Station (NAS) Patuxent River, Webster Field Annex, the Navy saw an opportunity to increase the scope and beneficial effects of its shoreline stabilization project by incorporating common objectives of various Chesapeake Bay stakeholders. The National Aquarium in Baltimore (a CELC) Aquatic Conservation Team (ACT) partnered with the Navy, County Soil Conservation District and the Southern Maryland Resource Conservation and Development Board to restore 1.5 acres of tidal wetland habitat. Approximately 11,000 Spartina alterniflora and 19,500 S. patens were planted along 3,500 ft. of shoreline. A total of 96 volunteers contributed 768 hours to the plantings in May 2003. The project also included creation of 3-dimensional oyster reefs (the Oyster Recovery Partnership donated 40,000 oyster spat to be placed on the reef) as breakwaters and wave shelter for eelgrass. The Alliance for the Chesapeake Bay coordinated the planting 4,500-eelgrass plants behind the reefs, with additional assistance by volunteers. To date over 100 volunteer hours have been logged for this project.

Using this cooperative approach, several significant, attainable goals were identified and achieved in partnership of over 10 Federal, state and non-profit groups. The team was able to meet five of the Chesapeake Bay Agreement goals: oysters, submerged aquatic vegetation, education and outreach, public access, and nutrients and sediments.

SERIT

South Carolina Oyster Restoration and Enhancement (SCORE)

The South Carolina Oyster Restoration and Enhancement (SCORE) program exemplifies how organizations with complimentary abilities can work together to enable high-quality, large-scale restoration of a coastal ecosystem. Upon the inception of the program, the South Carolina Department of

Natural Resources cultivated an extensive agency network that has fashioned a unique approach to handle the complex nature of restoring oyster habitat throughout South Carolina.

In order for juvenile oysters to survive, it is necessary for them to adhere to a hard substrate (preferably oyster shell). Unfortunately, there is a shortage of such substrate, as most shell gets thrown away after harvest. The SCORE team recognized the need for the need to involve citizens of all ages in shell recycling, reef construction, monitoring, and educational programs. These volunteers become stewards of their resources and stand as a constituency for coastal protection, while at the same time creating valuable habitat.

To date, the SCORE program has leveraged the skills and resources of 54 partnering agencies throughout the state. The efficacy of the program has attracted financial support from 3 federal, 2 state, and 3 non-profit agencies. Additionally, 30 community-based organizations and 16 schools lend essential resources and volunteer assistance to the effort on a sustained basis.

Festival Park

Roanoke Island Festival Park, including the Elizabeth II State Historic Site, is located on Ice Plant Island adjacent to Manteo, in Dare County, North Carolina. About 1,500 feet of coastal marsh and maritime forest was eroding along the islands shoreline. This habitat is important for oysters, fish and wildlife and supports commercial fisheries. The Festival Park Aquatic Habitat Restoration and Protection Project restored 5 acres of maritime forest and shallow estuarine habitat, including marsh, submerged aquatic vegetation and oysters. It includes a rock sill that increases diversity by providing attachment substrate and protects the habitat and adjacent public facilities from future erosion.

This project, a product of hands-on team synergy, may be relatively small in scope, but the final product supports the foundation of future ecosystem restoration projects in North Carolina. The team took personal ownership of this project and many of it's members, including the staff at Festival Park, enlisted their families and worked hand in hand with volunteers and practitioners to plant marsh grasses and trees provide by the Cape May Plant Materials Center, North Carolina Forest Service, U.S. Fish & Wildlife Service and North Carolina State University. Festival Park is a high use public education center and this restoration project will include interpretive signs to explain its features and their ecological benefits.

GMRIT

Breaux Act Task Force

The CWPPRA – LC&RTF (Coastal Wetlands Planning, Protection and Restoration Act - Louisiana Conservation and Restoration Task Force) was authorized in the Breaux-Johnston Act (Public Law 101-646-NOV. 29, 1990 Title III-Wetlands), also know as the Breaux Act or CWPPRA. When the Breaux Act Task Force was seated, Louisiana coastal wetland loses had amounted to nearly 1500 sq. miles over the preceding 50 years and were proceeding at a rate of approximately 25 sq. miles per year. Task force members were tasked to "....initiate a process to identify and prepare a list of coastal wetland restoration projects in Louisiana, to provide for the long-term conservation of such wetlands and dependent fish and wildlife populations...."

Working at an unprecedented scale (a 3.5 million-acre coastal landscape), with Federal and state money and reflective of their proactive commitment to the charge, the Task Force and its supporting committees and teams and partners have implemented or are involved with engineering projects that have or will create, restore, or protect 139,910 acres (142 projects). Through May 2004, the Breaux Act Task Force

has authorized for design or construction 142 restoration projects in Louisiana. As of 1 May 2004, some 52,000+ acres that have either been created, restored or loss prevented through the actions of the Louisiana CWPPR team.

San Jacinto National Monument Restoration

The San Jacinto National Monument project aims to restore the San Jacinto battleground/marshland to its original 1836 appearance. Phase II of the project, which has received the 2004 Coastal America Partnership Award, completes two major components of the Park Restoration Program; (i) restoration of 200+ acres of tidal marsh habitat, and (ii) construction of 3-mile long interpretative trail that includes a boardwalk, observation decks, kiosk exhibits, outdoor classroom, and an educational and outreach program. Observation decks and outdoor classrooms constructed along the new interpretive trail provide excellent vantage points for wildlife watching, as well as student and adult educational opportunities.

The Process through which the project has evolved is fairly uniquely, regarding the range of partners who came together to make the project a reality. Corporations (including the Texas CWRP), local government, state government, federal government and Non-Governmental Organizations (NGOs) all contributed materially to the project, while volunteers did everything from saw lumber to plant marsh grasses.

Sarasota Bay Artificial Reef Enhancement and Education Program

The Sarasota Bay Artificial Reef Enhancement and Education Program (SBAREEP) is an initiative of the Harllee Middle School of Bradenton and the "Science is Cool After School" Program of Manatee County, FL. With NEP grants, students built and deployed 191 reef balls into North Sarasota Bay. They plan to build 900 more reef balls to be deployed under residential and commercial docks in Sarasota Bay. In addition to building and deploying reef balls, the students created estuarine habitats in school classrooms, conducted field trips to marine and coastal habitats, became SCUBA certified, and created a reef maintenance team called, "Reef Rakers."

Since starting SBAREEP, the students have gained a greater understanding of the natural world around them and the role they play as caretakers. The students have shown much enthusiasm for sciences and the environment as well as an increase in grades and test scores for the Florida Comprehensive Achievement Test.

NWRIT

Skagit River Basin Group

The Skagit River Basin Group is a partnership comprise of up to 40 governmental and non-governmental organizations forged over the past 15 years to plan, develop, and implement ecosystem-based programs and projects within the basin. In 1978, Congress designed 158 miles of the Skagit as a national Wild and Scenic River. The partnership over the past decade and a half has developed and implemented a variety of programs and projects around the following six stewardship themes for the river basin: watershed restoration and salmon recovery, habitat protection, conservation education, sustainable recreation, community development, and assessment and monitoring. The Skagit Group's partnerships vary in form and size, from informal informational sharing with a few constituents, to long-term, intensive programs.

Over the past 10 years, 100 miles of roads have been decommissioned, up to 300 road miles have been storm-proofed or upgraded, 5 000 acres of riparian area have been treated (re-vegetated), and up to 50 road culverts repaired or replaced to provide unrestricted fish passage. In addition, numerous salmon

habitat restoration projects have been implemented within the river estuary areas and along the river corridor itself.

AKRIT

Silver Salmon Creek Restoration Team

In 2001, the Alaska Department of Fish and Game and the Kenai Watershed Forum (KWF) completed a series of fish passage assessments on the Kenai Peninsula and identified a road crossing on Silver Salmon Creek as a high priority restoration site. At that time, it was determined that the replacement of an undersized culvert and restoration of the channel would reopen eight miles of stream for unimpeded use by Chinook and Coho salmon, as well as Dolly Varden char, rainbow trout and other aquatic species. When an unexpected flood event transformed a relatively simple and inexpensive fish passage restoration project into an expensive project necessitating unique stream modeling and channel design capabilities, the Team was able to quickly redefine project goals and engage additional partners and funding sources.

The Silver Salmon Creek project now has the support of a dozen partners that have leveraged more than \$100,000 in funds plus in-kind donations from multiple public and private sources. As one of the first major fish passage restoration efforts on the Kenai Peninsula, the Silver Salmon Creek project is an excellent demonstration of both restoration techniques and the benefits of public/private partnerships. The scope of expertise and agency capability that the team has brought to the project is ensuring that it will be accomplished in a timely and cost-effective manner. Final restoration of the natural gradient and velocity of Silver Salmon Creek will take place in Summer 2004.

2004 Coastal America Spirit Award

Navy/Atlantic Wood Industries Joint Approach Response Action (JARA) Project and the Navy Environmental Restoration Team/Paradise Creek

Two projects undertaken by the Department of the Navy have earned a combined Spirit Award for 2004.

The Navy/Atlantic Wood Industries Joint Approach Response Action (JARA) project at Norfolk Naval Shipyard (NNSY) South Gate Annex and Atlantic Wood Industries (AWI) properties commenced in Portsmouth, Virginia. This project involved "cross boundary contamination" between a Navy Installation Restoration (IR) site and a neighboring private property (AWI). The unique legal agreements and partnerships required to expedite restoration of this site were the driving force behind development and implementation of the JARA concept. A shared vision for effective and timely restoration of the site allowed the U.S. EPA, Navy and AWI to establish and maintain the partnership needed to develop these groundbreaking agreements (first of their kind) to jointly address the contamination at both sites and to integrate regional Chesapeake Bay program initiatives into the final remedy for site restoration (engineered tidal wetlands and upland riparian components).

The New Gosport landfill on Paradise Creek contained over 55,000 tons of abrasive blast material (ABM), contaminated soils, and lead-tainted paint chips from ship blasting operations from 1969 through 1970. The team's original plan was to completely excavate all of the ABM and dispose of the material as hazardous waste, but the projected costs of this method far exceeded the total funding allocated for the project. To prevent complete scrapping of the project and to avoid continued cleanup delays, the Navy Environmental Restoration Team/Paradise Creek petitioned all stakeholders to explore creative and

innovative alternatives for the site. The team determined that in-situ stabilization of the lead-contaminated material would meet the approved cleanup goals under CERCLA and substantially reduce the overall cost of disposal by rendering the material non-hazardous. This innovative approach reduced the estimated normalized project cost from approximately \$90 per ton (~\$5 million total) to approximately \$42 per ton (~2.5 million total) and the resulting non-hazardous material was re-utilized as a cap for a regional landfill (creative re-use).

2004 Coastal America Special Recognition Award

National Aquarium in Baltimore: Schoolyard Spartina-Chesapeake Bay Wetlands

The National Aquarium in Baltimore is enhancing its existing community partnerships by involving students with growing wetland plants at their schools and participating in habitat restoration projects. Through this program, students contribute to restoration activities of Chesapeake Bay tidal wetlands, investigate the life cycle of plants and their importance to the estuarine ecosystem, help to maintain wetland plant nurseries, test water quality, and gain problem-solving skills. The Wetland Nursery program is a hands-on conservation action program that seeks to teach students and their teachers about the inherent connection between land and water and instill in them a sense of stewardship, as they build their own nursery and contribute to restoration activities of Chesapeake Bay tidal wetlands.

As a result of this program, over 20,000 S. alterniflora have been planted by students in wetland restoration site. Physical results include habitat enhancements at these restoration sites. Additional results include providing over 450 students with meaningful Bay experiences and making them more aware of the value and complexity of the Chesapeake Bay and its watershed.